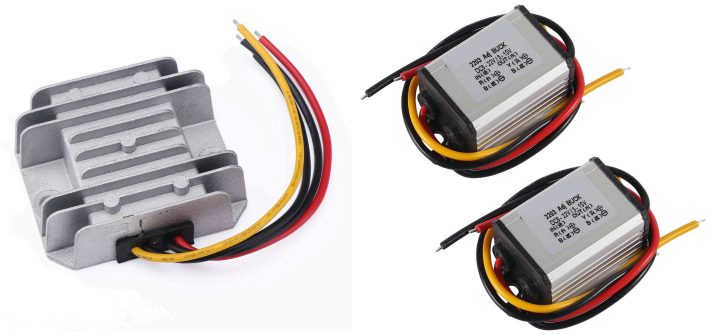
Powering the Raspberry Pi

Raspberry Pis require a 5v power supply connected through the USB interface (micro USB for Pi 3 or Pi zero, USB-C for Pi 4 or newer). You will power the pi in one of two different ways depending on context:

On the table: Use a 5v wall wart with the appropriate USB connector on it. Make sure your power supply meets the amperage requirements published in the rPi documentation.

On the robot:

- Connect a 5v “Buck Converter" capable of at least 5A of current to the Power Distribution Hub (PDH). CC4H Robotics has several variants of this around that look like the ones shown below. The red/black wires will generally be the input (to to PDH) and yellow/black will be the output (to the rPi)



- Put a 10A breaker in the corresponding channel of the PDH.
- Use a USB pigtail connector with the appropriate USB connector to connect the output of the buck converter to the rPi. Make sure to match the polarity of the red/black wires to the +/- on the buck converter!

- If using a Raspberry Pi zero, make sure you plug the micro USB connector into the input labeled PWR IN not USB!